

Clean Versions of Replacement Claims

Please cancel claims 1-3, 6, and 9 without prejudice and amend claims 10-14 and add new claims 15-28 to conform to the following clean versions.

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10. A method of performance monitoring in a distributed system, comprising the steps of:

determining a set of significant events associated with a distributed application in the distributed system;

providing each of a set of nodes applications associated with the distributed application with a recorder function which when called by at least one function in the node application associated with a significant event in the distributed application generates a record that identifies the significant event and includes a time-stamp for the significant event obtained from a corresponding synchronized clock;

running an experiment in the distributed application that generates one or more of the significant events;

obtaining the records from the node applications and analyzing the records.

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11. The method of claim 10, wherein each record includes an event code associated with the corresponding significant event.

12. The method of claim 10, wherein the step of analyzing the records comprises the step of generating a graphical representation of the records.

13. The method of claim 10, further comprising the step of determining a set of delays in execution of the node applications associated with the generation of the

records.

14. The method of claim 13, further comprising the step of correcting the records in response to the delays.

15. A distributed application, comprising:

a set of node applications which communicate via a network, each node application having at least one function which is associated with a significant event in the distributed application and further having a recorder function which when called by the function obtains a time-stamp for the significant event from a corresponding synchronized clock;

over the distributed application
an event log for each node application, each event log for holding a record of the corresponding significant event and time-stamp such that the time-stamps provide a synchronized time base in the distributed application for evaluating the significant events.

16. The distributed application of claim 15, wherein each function generates an event code which identifies the corresponding-significant event.

17. The distributed application of claim 16, wherein each recorder function obtains the event code from the corresponding function and writes the event code into the corresponding event log along with the corresponding time-stamp.

18. The distributed application of claim 15, wherein one or more of the node applications executes on a node that includes the corresponding synchronized clock.

19. The distributed application of claim 15, wherein one or more of the node applications executes on a node that

is connected to a ^{relationship} companion node that includes the corresponding synchronized clock.

8 20. The distributed application of claim 15, further comprising ^{Protocol, Database} means for obtaining the records from the event logs via the network and analyzing the records using the synchronized time base.

62. 21. The distributed application of claim 15, further comprising means for starting and stopping the recording of records in one or more of the event logs.

22. 22. The distributed application of claim 15, wherein one of the significant events is a generation of an HTTP command in the distributed application. ^{Protocol}

23. 23. The distributed application of claim 15, wherein one of the significant events is a transmission of a message on the network.

24. 24. The distributed application of claim 15, wherein one of the significant events is a receipt of a message on the network.

25. 25. The distributed application of claim 15, wherein one of the significant events is a database access.

26. 26. The distributed application of claim 15, wherein one of the significant events is a generation of a control value in the distributed application.

27. 27. The distributed application of claim 15, wherein one of the significant events is a receipt of sensor data.

28. 28. The distributed application of claim 15, wherein one

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of the significant events is an application of a control value to an actuator.
